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OUR NEW STATE

From the Congressional Record
September 2, 1959

Hon. A. S. Mike Monroney
Alaska's Air Transport

The National Airport Plan issued by the Federal Aviation Agency includes 270 Alaska air commerce airports—4 of them intercontinental, 9 continental, 68 trunk, 111 local, and 78 seaplane facilities. Also included in the plan are 64 general aviation airports.

Aircraft: Alaska's owned total of active registered aircraft was 1,179 as of last January 1. In this measurement we were not, as you might expect, close to such sparsely settled Western States as New Mexico, Wyoming, and the like—but rather to more populous States like Oregon and Louisiana. To put it in another way, Alaska has 1 aircraft for every 180 residents, which is unquestionably the highest ratio in the United States.

Of these 1,179 aircraft, 56 were, under the new FAA classification, listed as scheduled and irregular air carriers. However, some of our carriers are in the next two categories—among the 64 multi-engine planes and 420 postwar 4- and 5-place single engine planes listed under general aviation. Finally, in the all other category, we have 639 more aircraft.

At the same time, we had 2,877 active pilots, or about 1 Alaskan out of every 75. A number of others who once were licensed no longer are on the active list There has been a lot of talk lately about retiring pilots at the age of 60, or thereabouts. This reminds me that I am now engaged in a research operation aimed at discovering whether A. A. Bennett is still in the land of the living. If he is, you may be sure that he is still flying at an age not exactly known to me but surely such that he would consider a pilot of 60 a mere youngster. From Fairbanks, where he was one of the organizers of the Bennett-Rodebaugh Airplane Co., A. A Bennett went down to Idaho He had his commercial license renewed there in 1957 but as yet my research organization has not advanced beyond that point Bennett was one of the fabulous characters of early-day Alaska aviation He steadfastly refused to go in for such a modern contrivance as a cabin airplane Forced finally to give in by the stress of economic competition, Bennett persuaded the Zenith people to build him a special plane with a cabin for the passengers up forward and open cockpit for the flyer way back aft. Bennet was not adverse to telling anyone, most particularly his passengers, the reason for this. He admitted that airplanes fell down once in a while out of the sky and hit the hard, hard earth and he did not propose to be right on top of the engine when and if this occurred. Let the passengers bear the brunt of this while he took charge from the rear, Bennett said.

And he had the clearest blue eyes ever possessed by man It was this oldtimer's persistent insistence that his eyesight was perfect because when flying he took off his goggles and stuck his head out of the cockpit. He said the gale into which he then faced toned up his optic muscles, and did everything except erase original sin But I must guard myself, for it is easy to start reminiscing about an extraordinary breed of men—the early-day Alaska pilots

A significant illustration occurred right here in Anchorage last week, revealing that today's men of wings are in tune in every way with those who started Alaska's aviation This came about when Don Sheldon of Talkeetna was presented with the Special Service Award by General Necresop. This is the highest award given a civilian by the Air Force.

NOTE: Those of us who know A. A. Bennett recognize that he personifies the rugged barnstormer who could drive an airplane without reference to any other instrument except the part of his anatomy contained within the seat of his pants.

Wiley

WEATHER

As we probably should have expected, many of the additional or new aviation weather services are scheduled for the more populous heavily traveled areas of the nation. This is a brief summary of plans that will directly affect Montana, as far as we know now:

1 Two FAWS forecasters (GS-11) will be added at Great Falls, one by January 1, 1960, and the other by July 1, 1960.

2. An airline teletype drop for picking up PIREPS directly from airline operations circuits will be installed by July 1, 1960, at Great Falls.

3 A dual voice recorder, connected to Air Traffic Control radio and telephone channels, will be installed at GTF FAWS by July 1, 1960. This will insure prompt receipt of PIREP information by FAWS center

4. Facsimile goes in at BIL between January 1 and March 31, 1960.

5. TelAutograph installations at GTF and BIL are scheduled between April 1, 1960 and July 1, 1960. This will consist of recorded pictorial weather briefings, repeated automatically as needed.

6. Transcribed Aviation Weather Broadcasts over FAA non-directional radio facilities will be installed at Billings, Miles City, Bozeman, Great Falls, and Missoula. The Bozeman broadcast material will be prepared at WBAS Helena, and will be relayed by 60 w.p.m. closed teletype circuit to Bozeman (Belgrade) where FAA operators will make the tapes for continuous automatic weather broadcasts. This will take place after January 1, 1960, and will involve new material for broadcast at least six times a day. The broadcasts are to be designed to serve all airports in the Bozeman listening area (within about a 150-250 mile radius) primarily as pre-flight aids. Such points as Three Forks, Gardiner, Ringling, White Sulphur Springs, Ennis, and Townsend will be served—if radio receivers are available.

This service will be broadcast over similar FAA L/MF radio facilities at the following points, with the WBAS that will provide broadcast material shown in parentheses: Miles city (Billings), Great Falls (Great Falls), Billings (Billings), Bozeman (Helena) Missoula (Missoula).

One position is being added to the staff to cover the additional work involved. Whether this is enough remains to be seen.

R. A. Dightman

WARNING IMPORTANT NOTICE WARNING
TO ALL "FIRE-BEES"
"BE" NOT WHERE THE FIRES BE!

The extensive use of aircraft in fire fighting in California has created a high congestion of aerial traffic in fire areas. Within minutes after discovery of fires in grass, brush, or forest areas, planes are assigned to work in that area. These aerial "fire wagons" are assigned specific runs at various altitudes along ground fixes, requiring maximum pilot attention to ground objects. They cannot devote the normal amount of attention to air traffic.

The private pilot who flies into such areas as a spectator not only impedes State and Federal aerial fire fighters, but is inviting real tragedy that endangers lives "Gawking" at a fire from 5,000 feet might seem safe to you, but you just might be run down by a "Big Red Flying Fire Wagon." Playing Russian Roulette is much safer—**ELSEWHERE!**

Quoted from California Areonautics Commission

The young man was facinated by the strapless evening gown worn by his beautiful date.

"What holds it up,?" the young man asked

"Gravity," was the immediate response.

"Gravity?"

"Yes," she said "The gravity of what will happen if it should fall."

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"**To foster aviation as an industry**, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development**, and **advancement of aviation**; to develop uniform aviation laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

ELWOOD RICHARD QUESADA

Next to the jet engine, perhaps the most powerful and quick-moving influence on U.S. aviation today is a onetime fighter pilot named Elwood Richard Quesada. As the first administrator of the new Federal Aviation Agency, "Pete" Quesada has the tough task of ensuring the safety of the nation's 93,900 aircraft and millions of passengers as the U. S. slams into the jet age with the speed—and potential hazard—of a .45-cal. bullet. Last week, after buzzing Senators for weeks, Pete Quesada won a major victory. The Senate restored $48 8 million of the $76 million cut by the House from FAA's $587 million jet-age budget, bringing the total appropriation for operating expenses to within only $6,000,000 of what Quesada asked. Chances for the revised bill's passage: excellent. The restoration gives Quesada virtually all he wanted, means that he will have the money to set up air controls, hire the men to man radar stations.

A sturdily built man, curly, close-cropped hair and a smile that flashes like a beacon light, Quesada, 55, inherited his Spanish father's dark good looks and his Irish mother's charm and temper He can be blunt or suave-but in either case he is likely to know what he is talking about. A pilot since he was 20, he has flown every type of Air Force plane, and has been checked out to pilot the huge KC-135 jet tanker. Quesada wields more power than any U.S. air administrator before him: all the duties of the old Civil Aeronautics Administration, plus the safety-rule-making powers once held by the Civil Aeronautics Board. He needs all of it if he is to replace the obsolete U.S air-traffic control system with a new one able to safely handle both jets and prop planes.

Five years ahead of schedule, Quesada has set up radar-controlled jet expressways from New York to California and from Florida to Gander by persuading the Air Force to let FAA men use its radar facilities. He has worked out a common airspace system for both military and commercial planes, opened thousands of square miles of "restricted" military space to commercial carriers. He prefers to use soft talk instead of a big stick, but he can hit hard, especially when pilots fail to realize that jet planes require a much closer watch then older, slower planes.

After he discovered that the captain was out of the cockpit talking to passengers in the cabin when a Pan American Boeing 707 dived 29,000 ft. on a transatlantic flight (TIME, Feb. 16), Old Pilot Quesada fined both Pan Am and the captain. He followed that up by publicly warning the Air Line Pilots Association that pilots are to stay in their cockpits with their belts fastened instead of gladhanding with the public. When the ALPA attacked this enforcement as a "childish Gestapo program," Quesada fired back a blunt answer: Obey the rules or take the matter to court. Last week Quesada tightened up more. He took steps to ban commercial pilots over 55 from flying jet planes in the future, ground pilots 60 or older.

Along with the trust of the White House (he talks to President Eisenhower almost every day), Quesada has won the respect of almost everyone in Washington. When the House cut FAA's budget, he did not blame Congressmen, instead admitted; "I failed personally in not being able to convince the subcommittee of the urgency of our needs." Returning to the Hill he turned on all burners—and his very best charm—and won the day.

Pete Quesada got into aviation in 1924, when he left Georgetown University to join the Army Air Service, moved slowly up through the ranks until World War II, when he became a major general He distinguished himself as a combat commander in Europe and Africa, personally flew General Eisenhower over the D-day beachhead Later he commanded the joint task force in the first H-bomb tests at Eniwetok Atoll in 1951. After a brief hitch as head of Lockheed Aircraft's missile division, he returned to Washington

A gay bachelor until 42, Quesada married Mrs. Kate Pulitzer Putman, daughter of the late St Louis Post-Dispatch Publisher Joseph Pulitzer, in 1946, now has four children For relaxation, he plays golf (handicap: 9) or tennis. But most of his time is spent in his office on the third floor of a converted hospital across from Washington's Corcoran Art Gallery, where he logs twelve hours a day He works standing up, telephone to his ear, or prowls back and forth between his desk and work table His friends insist that he tries to do too much himself, but General Quesada sees no help for it "We're not just patching up an old system," he says. "This is a whole new system—and we've just started on it"

General of the Airways Time Magazine, July 6, 1959

FEDERAL AVIATION AGENCY
AVIATION SAFETY
QUARTERLY INSPECTION SCHEDULE

City	Airport	Dist. Off	Oct	Nov	Dec.
Big Timber	Municipal	GSDO-23		23	
Billings	Municipal	GSDO-23	5-12-19-26	2-9-16-23-30	7-14-21-28
Bozeman	Gallatin Field	GSDO-10	14* - 15**	18* - 19**	16* - 17**
Butte	Municipal	GSDO-10	11		15
Glasgow	Municipal	GSDO-23	7	1	9
Glendive	Municipal	GSDO-23	14	18	16
Great Falls	International	GSDO-10	7* - 8**	4* - 5**	9* - 10**
Havre	City-County	GSDO-10	6		8
Helena	Municipal	GSDO-10	12-19-26	2-9-16-23-30	14-21-28
Lewistown	Municipal	GSDO-23	28		13
Miles City	Municipal	GSDO-23	15	19	17
Missoula	County	GSDO-10	28* - 29**	24* - 25**	22* - 23**
Wolf Point	Mun. & Anderson	GSDO-23	8	5	10

*Writtens Only
**Flight Tests Only

THE AIRPORT SHORTAGE

Aviation researcher J. W. Pocock of Booz-Allen Applied Research, Chicago, recently pointed out that the present rate of utility airplane production is sufficient to require one new airport each day in the United States He estimates we are now about one thousand secondary airports short. If nothing is done to arrest the present trend of more airplanes to be handled by less airports, we will be three thousand airports short within ten years. Since we only boast about six or seven thousand landing fields of all descriptions, including private landing strips, the handwriting on the wall is quite clear—unless we protect and preserve the airports we have and build some new ones, the utility of our airplanes will soon reach the point of diminishing returns

In other words, when the burdens of landing on and taking off from busy airports, or of getting adequate service, or of going where you want to go when you want to—when these operations present too many problems and burdens, the time-saving and convenience advantages of air travel disappear and people simply start going by other means of transportation

The alarming part of the airport shortage is that it will become more critical before it can possible be arrested. The big need right now is secondary airports, which can help absorb the six to eight thousand new utility airplanes now coming off the assembly lines each year. Yet only a handful of our larger cities are concerned with perimeter airports for this type of traffic. Private enterprise airports are closing at a steady rate as real estate valuations jump and the land becomes more valuable for housing and industrailization. Practically all of the Federal grant-in-aid airport money has gone and will go to the large terminal airports because our offical airport philosophy has been to look after the scheduled airline terminal fields.

The secondary airports required by general aviation aircraft cost so little compared with the airline airports that it is ridiculous even to compare them. One of the most ludicrous situations in aviation today is the multi-million dollar terminal airports with long runways for all classes of airplanes. What we need is a dual runway system at the big city airports so that the airliners can use the long runways and general aviation airplanes can land and take-off simultaneously on parallel short ones It is absolutely imperative that general aviation airplanes be permitted to use the terminal airports and any attempts toward segregation must be fought vigorously.

Of course some cities have wisely planned perimeter airports. Most notable is the Minneapolis-St. Paul Metropolitan Airports Commission, which operates five secondary airports. A few communities like Dallas have private enterprise perimeter fields that are profit-making institutions. But until the runway areas of all privately-owned airports are dedicated to some town, city, county or state, there is no guarantee of permanency.

It would be wise for people who talk about the congested airspace to make it clear that what they are really talking about is congestion in the high density areas around the major airports. While we go along with the modernization of our airways system, we would like to see more realism in it and a national airport program developed to hit at the hub of our traffic problem—the airport shortage. The national air traffic studies now being made by the Federal Aviation Agency will no doubt, when completed, prove that unless we do something about it we cannot possibly maintain our present rate of aircraft sales and utilization. Flight Magazine

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FLY - IN HUNT

Have you tried a "Fly-In Hunt?" Now you can fly into the heart of the Wilderness Area, land at Schafer Meadow Landing Strip, and the following services will be available to you from September 14 to the last of the big game season At the west end of the landing strip, take the trail South to the mouth of Schafer Creek, cross the river by foot bridge, and there, within one-half mile of the Strip is the hunting camp. The Trail will be well marked. At the camp, which has been set up by Chuck Ray, Tex Woolsey, and Larry Stockhill, will be meals, a saddle horse and sleeping space for you for $12.50 per day If you desire a guide, they can be had for an additional amount. When you bag your elk, bear, goat, or deer, it will be picked up and packed to the strip for $30.00. All you need bring is your rifle and sleeping bag. Come in for as many days as you like. No need to make reservations. It should be mentioned, the FISHING IS GOOD TOO

THE LONG NIGHT

By Lowell D. Blanton

The evening watch on May 30 was routine at the beginning. When I took the duty in the airways station at 4 p.m., low stratus clouds had followed a warm front up the Mississippi Valley and were spreading out over the Central States. With the clouds came trouble on the airways as the ceiling and visibility lowered steadily in the thick smoke and haze trapped the clouds. The forecaster's prediction that fog would mix with the smoke and haze before midnight was not surprising, for I was well acquainted with the vagaries of springtime in northern Illinois.

The air traffic battle had started earlier in the day and intensified steadily as the weather worsened, and by nightfall the airways were in a state of controlled chaos. Surely, I thought, this is going to be no night for the uncertain—only the professionals will be out tonight. I couldn't have been more wrong.

Came the night and stillness, as the gray, opaque canopy of clouds and darkness closed in about me. Amid the hiss and hum of radios, the clatter of teletypes, and the raucous voice of pilots as they radioed their endless reports and requests for help and service, I paused to contemplate this paradox—this stillness. A quiet bedlam.

I thought of the strangers overhead in and above the clouds; wondered if they, with the throb of engines and harsh rasp of many voices in their ears, could feel the stillness. Strangers. Voices. The strangers and I.

The strangers were many now and increasing with each passing minute. The air was alive with their chatter, as they were stacked—two miles high—over Chicago, Milwaukee, South Bend. "Million-miler" veterans, checking weather and charts, planning. Sipping coffee as they orbited, weighing the odds through cigarette smoke.

Voices: Weather, please. A lower altitude, please. Sorry, no altitudes available. Request you expedite. Sorry, unable account traffic. It seemed my life had been but a long series of short conversations with people I had never met before and would never meet again.

An hour. Two hours. Many hours passed, and traffic slowed as the more prudent hesitated to involve themselves in the seemingly endless procedure of stacking and unstacking over the big terminals. I watched the second hand of the electric wall clock move steadily past the vertical.

Time: 9 p. m.

I brushed lunch crumbs from the operating desk and crossed the room to pour coffee.

Loud and clear it came then, another voice from out of the night. Loud and clear and urgent. I stopped pouring and went to the microphone.

"Rockford," the voice said, "This is Beachcraft Bonanza N91457. I've been homing on your range and apparently my ADF isn't working right. I think I'm badly lost." Quickly I checked my overflights file and his flight plan wasn't there. Another stranger. I began a routine lost-plane interrogation.

He had departed Indianapolis on a direct flight to Minneapolis, using his Automatic Direction Finder for navigation, changing from one airways range station to another as he progressed. Throughout the flight he had made no attempt to check the ADF against the range course by visual navigation. He had put blind faith in some electronic tubes, and blindly he had wandered about.

I said, "What was your last know position?"

He hesitated, trying to remember, "I guess the last time I positively knew where I was, was when I departed Indianapolis."

"At what time was that?"

"About five thirty, maybe five forty-five."

"Please verify that time. That would be more than three hours en route. You should be well out of my range."

"Yes, that's correct. I've been lost for over an hour, circling, trying to make the ADF work and looking for Rockford."

"Yes, that's correct!" He had burned an hour's precious fuel, aimlessly circling, while playing with an instrument he knew nothing about, looking for something that wasn't there.

Before asking, I knew the answer to my next question. "Four five seven, what is your remaining fuel supply?"

"Forty-five minutes. An hour maybe."

I glanced at the clock. I would give him forty-five and pray for an hour. An hour—maybe; an hour to find him, bring him in, get him on the ground.

I said, "The Rockford weather is solid overcast at six hundred visibility one mile in smoke and haze. Do you see any towns, rivers, highways, that you can identify?"

"No," he said, "I can't see a thing but clouds. I'm on top."

My mouth was suddenly dry. Fumbling for a cigarette, I forced my voice into a calm, almost bored monotone.

"Did you say you were on top?"

"That's right. On top of a solid layer. Have been for a long time."

"At what altitude?"

"I'm at five thousand, indicated about a thousand above the clouds."

Yes, I had heard him correctly. He was on top of solid clouds and they were twenty seven hundred feet thick. They were solid clouds, thick and solid, with no breaks, no holes, no thin spots. I knew that, for I had been checking and broadcasting weather for two hundred miles in all directions for five hours. Yet I had to hear it from him.

I pressed the switch. "Are there any breaks in the overcast?"

"No. It's a solid layer."

"Are you an instrument pilot?"

"What do you mean?"

"I mean are you a qualified instrument pilot? Do you have instrument training?"

"No. No, I've never been on instruments in my life. I'm just lost!"

Almost soothingly I said, "How did you get on top?"

That helped some and he said, "it was almost clear when I left Indianapolis. I climbed straight out to five thousand and later, while fooling with the ADF, I found myself on top. It just happened."

"Are you familiar with range orientation?"

"No. I don't know anything about that, either. I'm just a businessman with a new airplane. I know only enough about the radio to tune in the stations. I know I'm lost, though, and need help! These gas tanks aren't getting any fuller."

"I understand," I said.

I understood, but he didn't. He understood just one thing; he was lost and wanted help. I could understand that, too. It's hard for a desperate man to think ahead, to figure the angles, to recognize and understand the real problem. To me the problem was clear—so clear and so real that cold chills caressed my spine. And the dampness beginning under my shirt was cold and clammy.

It would have felt good to blame the poor bumbling fool in the Bonanza and scream back at him that nobody forced him to get into an airplane he hardly knew how to fly, and take off on a long night cross-country in weather suitable only for experienced professionals. But there was no time for hindsight. Hardly time for hopes.

For a few seconds I stared at the black microphone. Then I said, "Before I try a fix on you, I want you to realize what the situation is. I'm sure I can find you. I'm reasonably sure I can get you over the airport before you are out of fuel. I am not sure, though, that we can get you on the ground! Do you understand?"

"No," he said, and his voice was getting short and tight again. "No, I don't understand. I'm lost, and I'm about out of gas, and I don't understand why we're wasting time talking about it! You get me over an airport; then we'll worry about getting on the ground!"

"All right," I said, and now it was my turn to let the raw nerves show. "But you'll understand this; it's my job to help you find the airport; and I'll do everything I can to help you get on the ground. I've done a little flying myself, but I'm no instrument pilot. But this I do know; flying that airplane through those clouds will be the hardest thing you've ever done in your life. Do you understand that?"

"Okay; I understand. What are we going to do?"

"We are going to orient you by radio and bring you in over the Rockford airport. I will tell you what must be done, but the decision to do or not to do it is entirely yours. I can't fly your airplane for you."

"I understand."

The time was 9:07 p. m.

With the private-line telephone I set up an alert of all facilities within a hundred miles. The Chicago Control Center agreed to clear all altitudes in the area below six thousand feet.

Taking the portable microphone, I walked to the large wallchart. There I hesitated a moment. The man in the lost Bonanza was an utter stranger to me; yet in the few rushing minutes just past, I knew him. He had recently acquired a Bonanza for business travel, as many companies frequently do. With the airplane, he had received flight instruction, the bare minimum to obtain a private license. In his eagerness to use his new-found skill, he had flown to Indianapolis, a long hard cross-country under the best of conditions. The decision to make the return trip at night, in poor weather, was the decision of ignorance and inexperience.

Yes, he was a fool and one of many, but there was no pleasure in knowing that he now realized it as I desperately searched for a method of saving his life.

Again I pressed the mike button. Knowing the orientation procedure I would use was basic to my job; I could do it in my sleep. But should I do it now? How could that help him? I could find him, bring him home—then what?

Wouldn't it be best to try to get him down beneath the clouds, then orient him? But what about his fuel? Even if I were able, by some miracle, to bring him through the clouds, would there be sufficient fuel to bring him home? Must I even bring him home at all? Why not use the necessary fuel to descend him through the clouds, then use what remained for a controlled forced landing? A forced landing on a highway or an open field, even at night, wasn't necessarily fatal.

The possibility of his finding a break in the clouds while flying the orientation was always present. That would solve the problem. I would hope—and pray very hard!—for that. In the meantime I had to act; I had to make a decision and stick to it. In my mind was the pounding belief that the one important thing was to get that Bonanza nearer to me, to find it, bring it home, bring it close to me so that I could exert some will over it. I knew I would lose everything—the airplane, the pilot, even lose radio contact—if I let him get down in those clouds at low altitude at any distance from me. I wanted him very close when the showdown came.

Speaking slowly and distinctly, I said, "Now, I want you to listen very closely to my signal. Put everything else out of your mind. Listen, and describe exactly what you hear."

He described the code for a strong N-quadrant signal. Both my N-quadrants were very wide, about 135 degrees each. He could be anywhere.

"Now tune to Madison, Wisconsin range," I said, "and again describe the signal." I gave him the proper frequency.

He said Madison was barely readable but described a very weak A-quadrant signal, almost an on-Course. Next Peoria. Then Chicago. He came through without a babble, and I knew now that I had him fixed. At least I was quite sure of his direction from me. I lit a cigarette.

Now we were ready for the check procedure.

I said, "I want you to take up a northeast heading now, and turn your volume down as low as you possibly can and still receive my range signal. At the very moment you detect a change in signal strength, either higher or lower, advise me."

"All right, I'll do my best—" With that his voice nearly broke, and it seemed I knew about how he felt. "My gauges indicate empty tanks," he said. "There's some left I know, but I have no idea how much. Do you know where I am?"

Right then I wanted more than anything else to hang up the mike and turn off the radio. I blinked and forced the tightness from my throat.

"I'm quite sure of your direction from me," I said, "and I believe I know how far within, say, twenty miles.

If what you have told me is true, I [illegible]timate you have thirty minutes' fuel remaining. I believe your gauges are indicating normally."

He said, "Don't want you to think I'm ungrateful . . . realize you . . . can't afford mistakes . . ." A short burst of electrical interference blocked the radio momentarily. "But I can't last much longer." He came in loud and clear again. "Not trying to hurry you, but my gauges say empty and my son is getting sick!"

For a moment I was completely paralyzed. I wanted to scream at him: You didn't say anything about having your son aboard! Now you say he's getting sick! How old is he? Oh, goddamn you!

I returned to the desk, sat down, and dragged the heavy mike to me.

"How many passengers do you have aboard?" I asked.

"Just my son."

"Is the air rough? Is there turbulence? You said your son's getting sick . . .?"

"No, no turb . . . no, the air is smooth. It's not the air . . . the boy's just a young fellow . . . getting scared . . . making him sick."

"You should now be approaching my west course," I said, "close in to the station. Will you please listen carefully and describe any change in your signal."

Silence.

Then, "The signal is much louder now, and I'm getting more of a continuous tone in my headphones, although I can still hear that other signal."

"All right: That's fine! That's good! Now listen carefully: turn your volume down a little more, and when you no longer hear that other signal, and when the continuous tone is loud and clear, and when you hear nothing but that continuous tone—at that time I want you to turn right to a heading of nine three degrees magnetic. Is that clear?"

"I . . . I think so . . ."

I stormed at him. "Don't you understand? When you hear nothing but a tone, when there's nothing but a loud buzz in your ears, I want you to turn right to a ninety-three degrees on your compass! Do you understand me?"

"Yes, I understand. Turn right to ninety . . . to nine three degrees on the compass when I hear a loud tone. Is that . . .?"

"That is correct!"

Immediately he said, "The tone is strong now. I don't hear the other signal . . . nothing but the tone. Shall I . . .?"

"Yes! Turn right. Turn to nine three degrees and advise."

"Advise?"

"Advise when on course! When on nine three degrees! Advise!"

"Roger. Advise when on . . . I'm on course now, on ninety-three—"

"All right!"

The time was 9:40 p. m.

I hesitated, thinking for a moment; feeling sick and ashamed for allowing myself the luxury of anger and frustration

Again I glanced at the clock—9:40:20. I had wasted twenty seconds! But I hadn't, really. He was on schedule, approaching the range now. I was sure of that.

Take a break! Calm down. He'll be here any minute. Getting yourself all worked up won't make that airplane fly any faster.

Calmer now, I took up the mike. "You are approaching the range now," I said, "almost over the station. The range is about two miles from where I'm setting. The signal you hear will continue to increase in volume until you cross the range. At that time it will fade out quickly—for a moment you may hear nothing. Then it will increase again rapidly. Now, at the very instant your signal fades, I want you to make an immediate left turn to a heading of four five degrees magnetic: take that heading and advise. Understand?"

"I understand."

I was still on the phone, alerting local police and fire departments, when he came back to me, shouting this time.

"Rockford!" he yelled, almost blocking his transmitter with the volume. "Rockford!" I'm over the range and starting to turn. It's just like you said!"

For the moment at least, I was happy with him. "Roger!" I said. "Come left to four five. Straight and level. Hold it until I tell you different. I'll call you back."

I dashed out of the communications room, through the airport office, onto the parking ramp. Trying to still my pounding heart, I listened to the southwest, toward the range station. It came to me then, clearly—the steady, rising hum of a well-tuned Bonanza. I turned and raced back to the operating desk.

I snapped a glance at the clock—9:46 p. m.

Please! Please! Please!

Grabbing the mike, I said much too loudly, "Four five seven, you are now over the airport! I hear you clearly. Start a three-sixty turn immediately and orbit in your present area."

"Beginning a three-sixty . . ." A pause. Then, the quiet frenzy of final desperation harsh and rasping in his voice, he said, "For God's sake, tell me what to do! This engine is ready to quit."

Throughout the whole affair my mind had been fixed on a single thought—a good, steady, fullscale power approach! Nose up—a little; flaps down—just enough; power on—exactly right. My mind had kept saying that was the ticket, the only answer. With a good steady airplane, no turbulence to speak of, well trimmed and hands off, he must make it—maybe. But at this point I wasn't sure.

Now it came to me that if he could pull his power, slow her down, trim her slow and steady, a touch of flaps—that would be the answer. That might do it. And then he would have enough gas for a pull-up in case he missed his approach or god[illegible] it up in the clouds. Might even get back on top for another try. I mashed the button. "You are now circling the airport," I said. "I can hear you from inside the station. There isn't time to talk this thing out, there just isn't time!"

A sudden thought hit me. Good God! Why hadn't I . . .

I said, "Do you happen to have chutes—parachutes—on board?"

"No!" No para—"

"All right! We'll have to do it this way. Now . . . listen to what I say. You don't have to talk—just listen! Come around to a due west heading, due west. As you do, start slowing her down, slow her down and trim her up for a power approach—a normal power approach. Do you understand? Bring her around, headed west, power on. Slow her down—flaps down to approach position. Trim her up. Make her steady! Advise when you are headed west and slowed down."

I waited. Ten seconds . . . twenty . . . thirty!

Well, goddamn it, man, what are you waiting for? Can't you even fly the—?

The speaker came to life. "Rockford, I . . . I'm on two seventy now . . . slowing down . . . I don't know, I just don't . . ."

Slowly, very hard and precise, I said, "I know you don't know. All we can do is try."

"I understand! I'm down to eighty now, flaps down and power on."

"Roger! Continue trimming her. Trim her down good. Adjust your power and trim until she's descending at a steady five hundred per minute—five hundred per minute. Trim her good—do you understand? Trim her so good she'll let down at five hundred per minute—hands off. Do you get that—hands off?"

"I understand—"

Too many things kept popping up—things I should have thought of before; things that were no longer important. One thought, though, was paramount; somehow I had to the controls once he entered those clouds! If only I could make him realize, had to force him to keep his hands off be sitting behind him!

I looked at the mike. "Now, four five seven," I said, "you are going to bring her around very slowly and precisely to an east heading. Let her continue descending at five hundred per, just bring her around slowly to the east recover, then—take your hands off the controls! When you are eastbound, hands off. She will descend slowly into the clouds. You let her do that. Leave her alone! After you are in the clouds, do not touch her. Do not touch the controls!"

I paused to let that sink in. To think.

Then I said, "In the clouds everything will change for you. You will think the airplane is all wrong, that it is doing everything it should not do. If you leave it alone it will start a slow spiral to the left, but I don't think it will be enough to do any harm until you have broken out. What ever it does, you will think it's going to the right, or up, or down—even spinning. It won't be doing any of those things unless you make it do them. Don't touch it! . . . Are you eastbound?"

"I'm eastbound, yes . . ."

"Good! Now—take your hands off those controls!"

My eyes went to the clock. I watched the long, narrow hand tick off each death-slow second. Time. The hand was on its second trip around when it happened.

"Rockford! Rockford!" He was screaming now, his voice high-pitched, raw with hysteria. "It's turning, Rockford! Turning! Airspeed's high . . . going higher!"

"Get—off—those—controls!" I shouted at him. "Take your hands off that wheel! Get off! Get off! Cut that throttle! Do you hear me? Cut that throttle! Throttle Trotttle!"

Silence.

Then, "I've got the throttle closed . . . she's slowing down fast! I can't see! I can't . . ."

I broke in hard. "She's going to stall: Stall! Throttle! Give her throttle! Slowly, very slowly, give her throttle. Try to control the airspeed with your throttle! Just the throttle! Keep your hands off—except the throttle! She'll climb out if you keep your hands off her."

Thirty seconds. A minute.

Then it was very quiet. So quiet I could hear him sigh as he said, "I'm back on top now."

I sighed too.

Blankly I stared at the microphone, afraid to think, afraid to say the things I knew I must say. Again I looked at the clock; quickly turning away.

Speaking rapidly but determined to make it as firm and easy as I knew how, I said, "Maybe we have time for one more try. Let's try it with power off this time. You may lose your engine before—"

He broke in then, and for the first time there was no hint of urgency or emotion in his voice. No panic, no fear.

"It's no use," he said. "It's just no use. I can't do it. I was fine until we entered the clouds. I couldn't sit there and do nothing . . . I just couldn't: I know I can't do it again."

If I could only force him to! I said, "Listen, there's time—"

"That's it, Rockford. The engine just quit."

I grabbed the mike close to me. "You can still—"

Again he interrupted. "Forget it! You're wasting your time." A long, painful pause. Then, "I just want to say . . ."

Slowly I stood up and snapped off the receiver.

I stared at the silent speaker, suddenly aware of the stillness in the room. The teleprinters, too, had stopped for a moment and I was alone again.

Quote—Flight Safety Foundation.

Ref: Any FAA Airways Communications Station.

Note: Could this have been you?

MONTANA AIRPORT PROGRAM

The Montana Aeronautics Commission is presently engaged in a very active airport program which includes emergency-recreational type fields in several locations. The status of airport projects which are being participated in by the Montana Aeronautics Commission are as follows:

White Sulphur Springs: Gravel is being crushed to complete a stabilized turf surface runway 75′ wide x 4000′ long.

Ross International: A new stabilized turf runway was recently completed by the Aeronautics Commission with funds furnished by the Province of Alberta and the State of Montana as an airport to expedite border crossings between the United States and Canada for non-scheduled aircraft. This field is located on the border between Sweetgrass, Montana and Coutts, Alberta.

Fort Benton: A new paved runway has been completed for the Fort Benton Airport. The contractor, O'Neil Construction Company of Havre, is to be commended for the fine work put into the project.

Canyon Ferry: The Aeronautics Commission has under construction a new emergency-recreation field on the west shore of Canyon Ferry Dam in the vicinity of the Broadwater Boat Club. When completed the runway will be 75′ wide and 3600′ long with a stabilized turf surface, runway markers and a windsock.

Plentywood: A new paved runway has been completed at the Sherwood Airport.

Dillon: A new paved runway is being constructed at the Dillon County Airport.

Malta: Excavation for a new runway paving project has been completed and the gravel base is being installed. The base will be completed for use this fall and the blacktop paving installed in the spring.

Conrad: Plans for a new runway paving and runway extension project are ready and a call for construction bids will be issued in the near future.

Tiber Dam: A new emergency-recreational type field is under construction by the Aeronautics Commission in the vicinity of Tiber Dam. The runway is complete except for a powerline relocation, runway markers and a windsock.

Superior. Construction bids will be opened on November 18 for a complete new airport east of Superior. This project will consist of a stabilized turf runway, lighting, a beacon and runway markers.

Miles City: An asphalt overlay on the NW/SE runway has been completed at the Miles City Municipal Airport except for a seal coat.

Billings: A runway and taxiway reconstruction project has been completed at "Logan Field" except for a seal coat.

Chester: Construction bids for a new paved runway at the Chester City-County Airport will be opened October 9, 1959.

Bozeman: Plans and specifications are underway for a runway overlay and runway extension project at the Belgrade Airport.

Glasgow: A new terminal and administration building at the Glasgow Airport is complete except for final painting.

Meadow Creek: A runway extension project is under construction by the Aeronautics Commission and the United States Forest Service.

Columbus: A runway paving project is underway for the Columbus City Airport.

Laurel: A runway paving project has been recently completed at the Laurel City Airport.

Babb: Construction for a new stabilized turf runway is under way in the vicinity of Babb by the Aeronautics Commission. All excavation has been completed and the base course is being installed. The runway will be 100′ wide and 4000′ long. A windsock will be installed at each end of the runway, a tiedown area, access road and runway markers will be installed. It is expected to complete the Babb project this fall, weather permitting.

Scobey: Plans and specifications are being completed for a new paved runway at the Scobey City-County Airport.

Red Lodge: Plans and specifications are being prepared for a new paved runway at the Red Lodge City-County Airport.

Deer Lodge: Plans and specifications have been requested for a new stabilized turf runway at the Deer Lodge City Airport.

Elliott Field: The Aeronautics Commission recently completed a new stabilized turf runway in the vicinity of Rock Creek, twenty miles east of Missoula. The runway is 75′ wide and 4000′ long. Runway markers, a windsock and a tiedown area have been installed. At this location meals and lodging are available from the Rock Creek Lodge. Pilots can also obtain transportation into the hunting and fishing areas in the vicinity of Rock Creek.

Dell: Plans and specifications are being prepared by the Montana Aeronautics Commission for seal coating the Dell Runway this coming spring.

BLUE CANYON AIRPORT ACQUIRED

The old CAA emergency field at Blue Canyon in the Sierras between Reno and Sacramento has recently been acquired by the State of California through the California Aeronautics Commission. This field was to be abandoned by the FFA as inadequate for commercial air carriers. The Aeronautics Commission will maintain the field as an emergency facility for general aviation and to keep a Sierra recreation area open to the flying public. Operator inquires are invited.

GO-NO-GO

The following article, "Go-No-Go" was featured in a recent issue of The MATS Flyer, and as a knowledgeable bit of operational writing, it is reprinted here. While the articles does not discuss V1 and V2 specifically in the GO-NO-GO concept, it is appropriate if you remember that:

> V1 is only practicable when critical field length and total runway length coincide. If the runway length exceeds the critical field length, the no-go decision can safely be made after V1.
>
> V2 is that speed which gives the best rate of climb with one engine out, with the aircraft in the take-off and climb configuration.
>
> V2 is normally the lift-off speed and can never be less than 110% of minimum control speed during flight.

Before take-off check had been completed, the pilot shoved the throttles forward to maximum power and the transport started down the runway. Slowly it accelerated—too slowly. Take-off roll had been computed as 4,000 feet. At this point, the plane was well below flying speed. Take-off was continued. Observers reported hearing the engines malfunctioning. At the 7,000 foot mark, the transport struggled into the air.

Why—why did the crew not abort. . . Surley they realized they were not getting full power out of their engines. . . They must have known they were well beyond their computed ground roll before V2. . . What passed through their minds at V1 that they would continue take-off . . .

We will never know for sure. The people who could tell us are dead.

Just beyond the end of the runway, the torn and blackened remains of this multi-million dollar transport provide us with another incentive for added emphasis on determining minimum take-off performance requirements.

This type accident has shown a marked increase as higher performance aircraft have moved into the picture. Records further disclose that jet aircraft are even more critical than the recips. Three of the primary reasons are:

> Temperature and pressure altitudes are more critical on jet engine thrust.
>
> The margin between critical field length and "accelerate and stop distance" has decreased with the increase in take-off speeds without proportional increases in runway length.
>
> Slower acceleration, lower noise level, and reduced vibration make it more difficult for pilots to determine if acceleration is normal.

The Air Force is changing its methods of checking the performance of aircraft during acceleration. Presently going into each Flight Manual (formerly Flight Handbook) as it goes up for Command Review is the Go-No-Go concept of checking aircraft acceleration. SAC has used the Go-No-Go concept for some time. As the Flight Manuals of MATS aircraft are reviewed, the Go-No-Go concept is included along with an appropriate take-off and landing card. MR 55-6 has been revised to allow MATS operators to use the tech order TOLD card instead of MATS Form 100.

At the present time at least four companies are developing take-off monitoring devices designed to give the pilot a continuous appraisal of his aircraft's performance from the start of the take-off roll. Such devices would provide more time to evaluate performance and make the Go-No-Go decision.

One of the monitors proposed uses a ground-based Doppler radar and a computer, located at the end of the runway. Computations as to whether or not the aircraft is accelerating at a safe rate are made and this information could be passed to the pilot by means of colored lights along the edge of the runway or by radio.

All these monitoring systems require that the particular conditions (aircraft weight, length, temperature, altitude, winds, etc.) prevailing at the time of the take-off be considered.

Other monitors under development have accelerometer devices in the aircraft to indicate whether or not "normal" performance is being obtained. Instrumentation is designed to show relative acceleration rates and to warn the pilot, either audibly, visually or both, whenever actual indicated airspeed falls too far behind the desired value.

With the aircraft monitors, it is essential that the pilot precompute critical field length as, provided acceleration rate was within limits, he would not receive an abort warning were he to attempt take-off on a runway too short for embient temperature and weight conditions.

NOTE: NEXT IT WILL BE COUNT DOWN AND BLAST OFF — "TAKE ME TO YOUR LEADER"

FOR SALE; 1947 Stinson 150, VHF Trans. & Rec. Omni. Relicensed June of 1959. Engine excellent shape.—Cessena 170, 1949, VHF Trans. & Rec. G. E. Trans. & Omni. LF Rec. Excellent condition. P. O. Box 1585, Great Falls, Montana.

FOR SALE; 1956 Champion Traveler. 410 TT. Very clean. Always hangared. Elect. syst. A-1 $3,350. Charles Nelson, Box 232, Poplar, Montana.

FOR SALE: Cessna 170B. 1955 hrs TT. Radio VHF Trans. & Rec. LF Rec. Looks and runs like new. Leroy D. Aspevig, Rudyard, Montana.

FOR SALE: B-18 and Beech parts. Write or phone Mrs. Ralph Kelly, 512 Dearborn Street, Missoula, Montana

FOR SALE: A-2500 SKIS. Fit Cessna 170, A and B, and Aeronca-15AC, Luscombe-11A, Stinson-108, T-Craft-19. $150. Write Jack Lovelace, 1001 South Grand, Bozeman, Montana, or see at Flight Line, Gallatin Field, Belgrade, Montana.

FOR SALE: 1948 Stinson Station Wagon. 80 hrs. since engine major. Relicensed March 1959. High Freq. trans—low Freq. Rec. Good condition. $2,800. Write A. F. Rossberg, c/o Great Falls National Bank, Great Falls, Montana Phone GL 3-9258.

FLIGHT EMERGENCIES IN LIGHT TWINS

The widespread use of light twin-engine airplanes has emphasized the importance of a practical knowledge of emergency procedures. In many instances, these light twins are being operated by pilots who have had little formal transition training and no apprenticeship as second pilot in multi-engine airplanes.

A pilot with predominantly single-engine training and experience, who proposes to fly a twin-engine airplane, should study thoroughly all available technical information on its performance, the operation of its accessories and emergency equipment. Above all, he should arrange for a substantial amount of transition instruction from a competent multi-engine instructor.

Modern light twins deliver excellent flight performance, reliability, and safety when properly handled by pilots who know their airplane and have a thorough and practical knowledge of emergency procedures.

Safety in operation of the light twins requires that the pilot be familiar with two speeds:

1 Engine-out Minimum Control Speed (VMC)—the airspeed below which the airplane cannot be controlled in flight with one engine operating at full power, and

2 Engine-out Best Climb Speed—the airspeed which delivers the best rate of climb (or slowest descent) with one engine out. This may be very close to the engine-out minimum control speed.

In addition, there are three important principles to be remembered in flying the light twins (1) Altitude is more valuable to safety after take-off than is airspeed in excess of the best single-engine rate of climb speed. In the event of an engine failure, excess airspeed is lost much more rapidly than is altitude. (2) Climb or continued level flight is impossible with gear extended and a propeller windmilling in many of the current light twin-engine airplanes. (3) After an engine failure at cruising, METO power should be applied immediately. The operating engine should be throttled back only when and if level flight is definitely established.

The engine-out minimum control speed is available from the manufacturer's airplane flight manual and may be confirmed by experiment. The speed published is established for the most critical condition—the airplane fully loaded and full take-off power on the operating engine. Since the power output increases at lower altitudes, engine-out control loss is more critical on take-off especially at low elevations.

A multi-engine pilot must know and observe this minimum control speed. Any attempt to continue flight on one engine at a lower speed will result in a loss of control and a probable crash.

In the event of a sudden engine failure at an airspeed below the engine-out minimum control speed, the operating engine must be throttled immediately to a point at which flight control can be maintained If this power will not prevent a loss of altitude an immediate landing must be effected. Banking slightly (not more than five degrees) toward the operating engine will aid in maintaining flight control without appreciable loss of lift effectiveness.

In many current twin-engine airplanes, unlike some of the older Multi-engine airplanes, the engine-out minimum control speed may be as much as 20 m.p.h. above the normal stalling speed of the airplane.

A pilot, when he assumes the responsibility for a twin-engine airplane, should determine from a reliable source, or by experiment, in what configuration of gear, flaps and propeller, the airplane will maintain altitude with a full load and an engine out.

The engine-out best climb speed is found in the airplane flight manual. This is the airspeed which gives the best rate of climb. The airspeed which gives the steepest angle of climb engine-out (for clearing obstacles) is usually slightly slower and may also be found in the flight manual.

Great care must be observed in maintaining either of these speeds for two reasons: (1) they require prolonged flight at speeds very close to the engine-out minimum control speed; and (2) a deviation of only a few m.p.h from the prescribed speeds results in a significant decrease in climb performance. A loss of climb will result just as certainly from an airspeed which is too high as from one which is too low.

Experiments, when conducted to determine the airspeeds for the best rate of climb and the best angle of climb engine-out, should be made at full gross weight, using the best rate of climb speed for at least five minutes.

To establish single-engine flight after an engine failure in cruising flight, it is recognized practice to apply maximum allowable power to the operating engine until level flight is clearly established. If the airplane is found to be capable of level flight or climb with the existing load, altitude, and temperature, appropriate power reduction can be made. In no case should the airspeed be allowed to fall below the engine-out best climb speed, even though altitude is lost, since this speed will always provide the best chance of climb or the least altitude loss.

The ability to climb at approximately 50 feet per minute in calm air is necessary to maintain level flight for protracted periods in even moderate turbulence.

The pilot should familiarize himself with the following general procedures for use in the event of a sudden engine failure:

1. FAILURE DURING TAKEOFF OR CLIMB-OUT

a. If airspeed is below engine-out minimum control speed—reduce power to maintain flight control, and gain speed if possible. Since you should never climb higher than necessary to clear immediate obstructions before engine-out best climb speed is attained, an immediate landing is usually imperative.

b. If airspeed is below engine-out best climb speed—attain that speed before attempting to climb

c. If airspeed is at or above engine-out best climb speed— keep maximum available power on good engine and hold engine-out best climb speed. If climb results, maneuver carefully for landing back at airport, otherwise prepare for landing at nearest available area. Keep gear and flaps retracted until you are sure of reaching desired landing spot.

d. If sufficient runway is available, land straight ahead, regardless of airspeed.

2. FAILURE DURING CRUISING FLIGHT

a. Increase power on good engine to METO

b. Maintain engine-out best climb speed.

c. Reduce power only when unneeded altitude is gained

d. Proceed to a landing at an airport, or the first available area, in accordance with 1. c. above.

George E. South, Supervising Inspector, FAA

"You remind me of the ocean," she said.
"Of course," he beamed, "wild, and uncontrollable, challenging and exciting, enduringly romantic."
"Naw," she replied. "You make me sick."

FOR SALE: 1947 Stinson, 150 HP. Voyager, Excellent fabric. Low time S.M.O.H. $3,250. Gene Paulson, Outlook, Montana.

FOR SALE: 1946 Cessna 120. New license. Good condition. Radio. Cowl flaps. $1,800. Robert Lynes, Sun River, Montana.

FOR SALE: One Jacobs 275 HP. R-2 engine with chrome cylinders complete with all accessories. 1430 hours since M.O.H. Make offer, Cal Ullman, 43 Nimitz Drive, Billings, Montana. Phone 9-6206.

FOR SALE OR TRADE ON AIRPLANE: 26 foot Owens cruiser. Sleeps 4 in cabin. 12 foot beam. 105 hp. Marine inboard engine. Engine overhauled and hull refinished inside and out last year. Two burner galley, ice box, head compartment, electric bilge pump, engine blower, 140 square feet in cabin with after deck. Located on Flathead Lake. Value $4,100. Will trade for light plane. R. J. Young, Box 57, Kalispell, Montana.

FOR SALE: Piper J4A. New cover, new interior, new glass, very clean $1,750.—Piper Tri-Pacer, 25 hrs. S.M.O.H. on 135. Super homer clock D. G. turn and bank. $3,975.—Dismantled A-35 Bonanza for parts. Wings, gear controls, instruments, radios (ADF-12B) ULTRA-5 with Omni) est.—E-185-8 Cont. engine. Zero since major, including all accessories. $1,300 exchange. Henry F. Meine, Dillon, Montana. Phone MU 3-2525.

YOU NAME IT—Vol. 10 No. 4. Received Newsletter August 1st Billings. News two months old—why not call it by another name? Mac.

WANTED: PA-11 Piper Cub. Have BC12D T-Craft to trade or sell. Write Philip Cadwell, Hulett, Wyoming.

WANTED: Holiday trip by air. An air-minded school teacher would like to go on a cross-country trip to any part of the country. If you have a seat to spare in your airplane during the Christmas Holidays and if you are making a trip between December 25 and January 4, please write or contact Mr. G. M. Tierney, Buffalo Public Schools, Buffalo, Montana.

WANTED: J-3 Cub salvage for parts. Lloyd Heberle, Box 8, Townsend, Montana.

IF ANYTHING EXTERNAL VEXES YOU, TAKE NOTICE THAT IT IS NOT THE THING WHICH DISTURBS YOU, BUT YOUR NOTION ABOUT IT, WHICH YOU MAY DISMISS AT ONCE, IF YOU PLEASE.

MONTANA AERONAUTICS COMMISSION
ORO Y PLATA

News Letter

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